JC06 Rec'd PCT/PTO 19 OCT 2005

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Applicant:

Eduardo N. MITRANI et al

Serial No.:

10/519,838

Filed:

January 12, 2005

For:

METHOD AND DEVICES FOR INDUCING

BIOLOGICAL PROCESSES BY MICRO-

ORGANS

Examiner: Not Yet Available

\$\text{\$\tau\times\time

Group Art Unit: Not Yet

Attorney

Docket: 28888

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

Enclosed is a PTO Form 1449 which lists citations which may be material to the patentability and examination of the above identified application. Also enclosed are copies of the references cited. These are submitted in compliance with the duty of disclosure defined in 37 CFR 1.56. The Examiner is requested to make these citations of official record in this application.

This Information Disclosure Statement under 37 CFR 1.56 is not to be construed as a representation that a search has been made, that additional matter which is material to the examination of this application does not exist, or that any or more of these citations constitutes prior art.

Respectfully submitted,

Martin O. Mojukar Martin Moynihan

Registration No. 40,338

Dated: October 6, 2005

PTO/SB/08a (08-03)

Approved for use through 07/31/2006. OMB 0651-0031 U.S.Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. Complete if Known Substitute for form 1449A/PTO Application Number 10/519,838 INFORMATION DISCLOSURE Filing Date January 12, 2005 STATEMENT BY APPLICANT First Named Inventor Eduardo N.MITRANI et al Art Unit N/A (use as many sheets as necessary) Examiner Name N/A Attorney Docket Number 28888 Sheet of 5 U.S. PATENT DOCUMENTS Name of Patentee or Pages, Columns, Lines, Where Examiner Cite Document Number **Publication Date** Initials* MM-DD-YYYY Applicant of Cited Document No Relevant Passages or Relevant Figures Appear Number-Kind Code^{2 (if known)} US-3,984,533 05-5-1976 **Uzgiris** 1 07-7-1976 2 US-3,996,345 Ullman et al. US-2002/0039786 04-4-2002 Reid et al. 3 01-25-1983 4 US-4,369,788 Goald US-4,043,343 08-23-1977 Williams 5 6 US-4,498,778 02-12-1985 White 7 02-29-2000 US-6,030,833 Seebach et al. 01-31-2002 8 US-2002/0012661 Saito et al. US-5,670,148 09-23-1997 9 Sherwin et al. 10 US-5,885,971 03-23-1999 German et al. US-4,533,635 06-6-1985 Guédon born Saglier et al. 11 12 US-4,940,666 07-10-1990 Boyce et al. 01-1-1994 13 US-5,282,859 Eisenberg US-5,292,655 08-8-1994 Wille Jr. 14 03-30-1999 15 US-5,888,720 Mitrani US-4,353,888 10-12-1982 Sefton 16 US-4,391,909 05-5-1983 Lim 17 US-4,666,828 18 05-19-1987 Gusella 19 US-4,683,202 07-28-1987 Mullis 04-12-1988 20 US-4,736,866 Leder et al. 21 US-4,801,531 01-31-1989 Frossard 22 US-4,879,219 07-7-1989 Wands et al. 23 US-4,892,538 09-9-1990 Aebischer Aebischer 24 US-5,106,627 04-21-1992 12-29-1992 Leder et al. 25 US-5,175,383 26 US-5,175,384 12-29-1992 Krimpenfort et al. 27 US-5,175,385 12-29-1992 Wagner et al. 28 US-5,192,659 09-9-1993 Simons 06-22-1993 29 US-5,221,778 Byrne et al. 12-21-1993 30 US-5,272,057 Smulson et al. 31 US-5,288,846 02-22-1994 Ouertermous et al. US-5,298,422 03-29-1994 Schwartz et al. 32 US-5,347,075 09-13-1994 Sorge 33 01-1-1994 Weinshank et al. 34 US-5,360,735 US-5,387,742 07-7-1995 Cordell 35 US-5,464,764 07-7-1995 Capecchi et al. 36 US-5,487,992 01-30-1996 37 Capecchi et al. 38 US-6,472,200 10-29-2002 Mitrani 11-28-1989 39 US-4,883,666 Sabel et al. 02-12-1974 40 US-3,791,932 Schuurs et al. 41 US-3,839,153 01-1-1974 Schuurs et al. 42 US-3,853,987 12-10-1974 Dreyer 01-27-1976 Rubinstein et al. 43 US-3,935,074 US-4,034,074 05-5-1977 Miles 44

1

45	US-4,098,876	04-4-1978	Piaso et al.	
46	US-5,011,771	04-30-1991	Bellet et al.	
47	US-5,281,521	01-25-1994	Trojanowski et al.	
48	US-3,850,752	11-26-1974	Schuurs et al.	
49	US-3,901,654	08-26-1975	Gross	
50	US-5,888,720	03-30-1997	Mitrani	
51	US-6,372,482	04-16-2002	Mitrani	
52	US-3,867,517	02-18-1975	Ling	
53	US-3,850,578	11-26-1974	McConnell et al.	
54	US-2003/0157074	08-21-2003	Mitrani	
55	US-2003/0152561	08-14-2003	Mitrani	
56	US-2003/0152909	08-14-2003	Mitrani	
57	US-2003/0152562	08-14-2003	Mitrani	
58	US-6,001,647	12-14-1999	Peek et al.	
59	US-6,303,136	10-16-2001	Li et al.	
60	US-5,871,767	02-16-1999	Dionne et al.	
61	US-5,861,313	01-19-1999	Pang et al.	
62	US-3,734,851	05-22-1973	Matsumura	
63	US-5,032,508	07-16-1991	Naughton et al.	-
64	US-4,835,102	05-30-1989	Bell et al.	
65	US-4,888,291	12-19-1989	Barrandon et al.	
66	US-4,798,885	01-17-1989	Mason et al.	
67	US-5,387,576	07-7-1995	Mitrani	

No. Foreign Patent Documents		T		PATENT DOC	FOREIGN	Cite	Examiner
Country Code* Number* Kind Code* (If known)	int Passages	Pages, Columns, Lin Where Relevant Passa	Applicant of Cited Document Wi				
69 PCT WO 97/27742 07-7-1997 Paik 70 PCT WO 96/30492 03-3-1996 Hu et al. 71 PCT WO 01/07098 01-1-2001 Mitrani 72 PCT WO 00/53795 09-14-2000 Katz et al. 73 PCT WO 01/23541 05-5-2001 Fodor et al. 74 PCT WO 97/15655 01-1-1997 Sittinger et al. 75 JP 11-76399 03-23-1999 Imai et al. 76 PCT WO 94/06908 03-31-1994 Littman et al. 77 PCT WO 94/06908 03-31-1994 Littman et al. 78 PCT WO 94/23049 10-13-1994 Gearhart et al. 79 PCT WO 94/28123 08-8-1994 Thompson et al. 80 PCT WO 99/06073 02-11-1999 Isner 81 PCT WO 98/15575 04-16-1998 Parmacek et al. 82 PCT WO 98/45301 03-3-1998 Mickle et al. 83 PCT WO 98/15225 05-23-1996 Mitrani 84 PCT WO 96/15225 05-23-1996 Mitrani	gures Appear	or Relevant Figures Ap	or R				
70 PCT WO 96/30492 03-3-1996 Hu et al. 71 PCT WO 01/07098 01-1-2001 Mitrani 72 PCT WO 00/53795 09-14-2000 Katz et al. 73 PCT WO 01/23541 05-5-2001 Fodor et al. 74 PCT WO 97/15655 01-1-1997 Sittinger et al. 75 JP 11-76399 03-23-1999 Imai et al. 76 PCT WO 93/14200 07-22-1993 Wadworth et al. 77 PCT WO 94/06908 03-31-1994 Littman et al. 78 PCT WO 94/23049 10-13-1994 Gearhart et al. 79 PCT WO 94/28123 08-8-1994 Thompson et al. 80 PCT WO 99/6073 02-11-1999 Isner 81 PCT WO 98/15575 04-16-1998 Parmacek et al. 82 PCT WO 98/54301 03-3-1998 Mickle et al. 83 PCT WO 96/15225 05-23-1996 Mitrani 84 PCT WO 03/040686 05-15-2003 Pearlman et al. 85 PCT WO 03/049783 06-19-2003 B		<u></u>	11222			, · · ·	
71 PCT WO 01/07098 01-1-2001 Mitrani 72 PCT WO 00/53795 09-14-2000 Katz et al. 73 PCT WO 01/23541 05-5-2001 Fodor et al. 74 PCT WO 97/16555 01-1-1997 Sittinger et al. 75 JP 11-76399 03-23-1999 Imai et al. 76 PCT WO 93/14200 07-22-1993 Wadworth et al. 77 PCT WO 94/06908 03-31-1994 Littman et al. 78 PCT WO 94/23049 10-13-1994 Gearhart et al. 79 PCT WO 94/23123 08-8-1994 Thompson et al. 80 PCT WO 99/6073 02-11-1999 Isner 81 PCT WO 98/15575 04-16-1998 Parmacek et al. 82 PCT WO 98/54301 03-3-1998 Mickle et al. 83 PCT WO 98/40686 05-15-2003 Pearlman et al. 84 PCT WO 96/15225 05-23-1996 Mitrani 85 PCT WO 03/049783 06-19-2003 Bellome et al. 86 PCT WO 03/049783 06-19-2003			 	 			
72 PCT WO 00/53795 09-14-2000 Katz et al. 73 PCT WO 01/23541 05-5-2001 Fodor et al. 74 PCT WO 97/15655 01-1-1997 Sittinger et al. 75 JP 11-76399 03-23-1999 Imai et al. 76 PCT WO 93/14200 07-22-1993 Wadworth et al. 77 PCT WO 94/06908 03-31-1994 Littman et al. 78 PCT WO 94/23049 10-13-1994 Gearhart et al. 79 PCT WO 94/28123 08-8-1994 Thompson et al. 80 PCT WO 99/6073 02-11-1999 Isner 81 PCT WO 98/15575 04-16-1998 Parmacek et al. 82 PCT WO 98/54301 03-3-1998 Mickle et al. 83 PCT WO 99/49807 07-7-1999 Mitrani 84 PCT WO 96/15225 05-23-1996 Mitrani 85 PCT WO 03/040686 05-15-2003 Pearlman et al. 86 PCT WO 03/049783 06-19-2003 Bellomo et al. 87 PCT WO 98/39035 09-11-1998							
73 PCT WO 01/23541 05-5-2001 Fodor et al. 74 PCT WO 97/15655 01-1-1997 Sittinger et al. 75 JP 11-76399 03-23-1999 Imai et al. 76 PCT WO 93/14200 07-22-1993 Wadworth et al. 77 PCT WO 94/06098 03-31-1994 Littman et al. 78 PCT WO 94/23049 10-13-1994 Gearhart et al. 79 PCT WO 94/28123 08-8-1994 Thompson et al. 80 PCT WO 99/06073 02-11-1999 Isner 81 PCT WO 98/15575 04-16-1998 Parmacek et al. 82 PCT WO 98/54301 03-3-1998 Mickle et al. 83 PCT WO 99/49807 07-7-1999 Mitrani 84 PCT WO 96/15225 05-23-1996 Mitrani 85 PCT WO 03/040686 05-15-2003 Pearlman et al. 86 PCT WO 03/049783 06-19-2003 Bellomo et al. 87 PCT WO 03/039382 05-15-2003 Pearlman et al. 89 PCT WO 98/39035 09-11-1998			Mitrani			1	
74 PCT WO 97/15655 01-1-1997 Sittinger et al. 75 JP 11-76399 03-23-1999 Imai et al. 76 PCT WO 93/14200 07-22-1993 Wadworth et al. 77 PCT WO 94/06908 03-31-1994 Littman et al. 78 PCT WO 94/23049 10-13-1994 Gearhart et al. 79 PCT WO 94/28123 08-8-1994 Thompson et al. 80 PCT WO 99/06073 02-11-1999 Isner 81 PCT WO 98/15575 04-16-1998 Parmacek et al. 82 PCT WO 98/54301 03-3-1998 Mickle et al. 83 PCT WO 96/15225 05-23-1996 Mitrani 84 PCT WO 96/15225 05-23-1996 Mitrani 85 PCT WO 03/049783 06-19-2003 Bellomo et al. 86 PCT WO 03/0499382 05-15-2003 Pearlman et al. 87 PCT WO 98/39035 09-11-1998 Herlyn et al. 89 PCT WO 91/12334 08-22-1991 Warren et al. 90 PCT WO 91/12334 08-22-1991			Katz et al.		PCT WO 00/53795	72	
75 JP 11-76399 03-23-1999 Imai et al. 76 PCT WO 93/14200 07-22-1993 Wadworth et al. 77 PCT WO 94/06908 03-31-1994 Littman et al. 78 PCT WO 94/23049 10-13-1994 Gearhart et al. 79 PCT WO 94/28123 08-8-1994 Thompson et al. 80 PCT WO 99/06073 02-11-1999 Isner 81 PCT WO 98/15575 04-16-1998 Parmacek et al. 82 PCT WO 98/54301 03-3-1998 Mickle et al. 83 PCT WO 99/49807 07-7-1999 Mitrani 84 PCT WO 96/15225 05-23-1996 Mitrani 85 PCT WO 03/040686 05-15-2003 Pearlman et al. 86 PCT WO 03/049783 06-19-2003 Bellomo et al. 87 PCT WO 03/039382 05-15-2003 Pearlman et al. 88 PCT WO 03/049626 06-19-2003 Bellomo et al. 89 PCT WO 98/39035 09-11-1998 Herlyn et al. 90 PCT WO 91/12334 08-22-1991 Warren et al. 91 EP 0364306 04-18-1990 Chao 92 EP 0418035 03-3-1995 Kemp et al. 94 EP 0271211 08-19-1992 Twardzik et al.			Fodor et al.	05-5-2001	PCT WO 01/23541	73	
76 PCT WO 93/14200 07-22-1993 Wadworth et al. 77 PCT WO 94/06908 03-31-1994 Littman et al. 78 PCT WO 94/23049 10-13-1994 Gearhart et al. 79 PCT WO 94/28123 08-8-1994 Thompson et al. 80 PCT WO 99/06073 02-11-1999 Isner 81 PCT WO 98/15575 04-16-1998 Parmacek et al. 82 PCT WO 98/54301 03-3-1998 Mickle et al. 83 PCT WO 99/49807 07-7-1999 Mitrani 84 PCT WO 96/15225 05-23-1996 Mitrani 85 PCT WO 03/040686 05-15-2003 Pearlman et al. 86 PCT WO 03/049783 06-19-2003 Bellomo et al. 87 PCT WO 03/049626 06-19-2003 Bellomo et al. 88 PCT WO 98/39035 09-11-1998 Herlyn et al. 90 PCT WO 91/12334 08-22-1991 Warren et al. 91 EP 0364306 04-18-1990 Chao 92 EP 0418035 03-3-1995 Kemp			Sittinger et al.	01-1-1997	PCT WO 97/15655	74	
77 PCT WO 94/06908 03-31-1994 Littman et al. 78 PCT WO 94/23049 10-13-1994 Gearhart et al. 79 PCT WO 94/28123 08-8-1994 Thompson et al. 80 PCT WO 99/06073 02-11-1999 Isner 81 PCT WO 98/15575 04-16-1998 Parmacek et al. 82 PCT WO 98/54301 03-3-1998 Mickle et al. 83 PCT WO 99/49807 07-7-1999 Mitrani 84 PCT WO 96/15225 05-23-1996 Mitrani 85 PCT WO 03/040686 05-15-2003 Pearlman et al. 86 PCT WO 03/049783 06-19-2003 Bellomo et al. 87 PCT WO 03/039382 05-15-2003 Pearlman et al. 88 PCT WO 98/39035 09-11-1998 Herlyn et al. 89 PCT WO 91/12334 08-22-1991 Warren et al. 91 EP 0364306 04-18-1990 Chao 92 EP 0418035 03-3-1995 Kemp et al. 93 EP 0361957 04-4-1990 Bell et al. </td <td></td> <td></td> <td>Imai et al.</td> <td>03-23-1999</td> <td>JP 11-76399</td> <td>75</td> <td></td>			Imai et al.	03-23-1999	JP 11-76399	75	
78 PCT WO 94/23049 10-13-1994 Gearhart et al. 79 PCT WO 94/28123 08-8-1994 Thompson et al. 80 PCT WO 99/06073 02-11-1999 Isner 81 PCT WO 98/15575 04-16-1998 Parmacek et al. 82 PCT WO 98/54301 03-3-1998 Mickle et al. 83 PCT WO 99/49807 07-7-1999 Mitrani 84 PCT WO 96/15225 05-23-1996 Mitrani 85 PCT WO 03/040686 05-15-2003 Pearlman et al. 86 PCT WO 03/049783 06-19-2003 Bellomo et al. 87 PCT WO 03/039382 05-15-2003 Pearlman et al. 88 PCT WO 03/049626 06-19-2003 Bellomo et al. 89 PCT WO 98/39035 09-11-1998 Herlyn et al. 90 PCT WO 91/12334 08-22-1991 Warren et al. 91 EP 0364306 04-18-1990 Chao 92 EP 0418035 03-3-1995 Kemp et al. 93 EP 0361957 04-4-1990 Bell et al.<			Wadworth et al.	07-22-1993	PCT WO 93/14200	76	
79 PCT WO 94/28123 08-8-1994 Thompson et al. 80 PCT WO 99/06073 02-11-1999 Isner 81 PCT WO 98/15575 04-16-1998 Parmacek et al. 82 PCT WO 98/54301 03-3-1998 Mickle et al. 83 PCT WO 99/49807 07-7-1999 Mitrani 84 PCT WO 96/15225 05-23-1996 Mitrani 85 PCT WO 03/040686 05-15-2003 Pearlman et al. 86 PCT WO 03/049783 06-19-2003 Bellomo et al. 87 PCT WO 03/039382 05-15-2003 Pearlman et al. 88 PCT WO 03/049626 06-19-2003 Bellomo et al. 89 PCT WO 98/39035 09-11-1998 Herlyn et al. 90 PCT WO 91/12334 08-22-1991 Warren et al. 91 EP 0364306 04-18-1990 Chao 92 EP 0418035 03-3-1995 Kemp et al. 93 EP 0361957 04-4-1990 Bell et al. 94 EP 0271211 08-19-1992 Twardzik et al.			Littman et al.	03-31-1994	PCT WO 94/06908	77	
80 PCT WO 99/06073 02-11-1999 Isner 81 PCT WO 98/15575 04-16-1998 Parmacek et al. 82 PCT WO 98/54301 03-3-1998 Mickle et al. 83 PCT WO 99/49807 07-7-1999 Mitrani 84 PCT WO 96/15225 05-23-1996 Mitrani 85 PCT WO 03/040686 05-15-2003 Pearlman et al. 86 PCT WO 03/049783 06-19-2003 Bellomo et al. 87 PCT WO 03/039382 05-15-2003 Pearlman et al. 88 PCT WO 03/049626 06-19-2003 Bellomo et al. 89 PCT WO 98/39035 09-11-1998 Herlyn et al. 90 PCT WO 91/12334 08-22-1991 Warren et al. 91 EP 0364306 04-18-1990 Chao 92 EP 0418035 03-3-1995 Kemp et al. 93 EP 0361957 04-4-1990 Bell et al. 94 EP 0271211 08-19-1992 Twardzik et al.			Gearhart et al.	10-13-1994	PCT WO 94/23049	78	
81 PCT WO 98/15575 04-16-1998 Parmacek et al. 82 PCT WO 98/54301 03-3-1998 Mickle et al. 83 PCT WO 99/49807 07-7-1999 Mitrani 84 PCT WO 96/15225 05-23-1996 Mitrani 85 PCT WO 03/040686 05-15-2003 Pearlman et al. 86 PCT WO 03/049783 06-19-2003 Bellomo et al. 87 PCT WO 03/039382 05-15-2003 Pearlman et al. 88 PCT WO 03/049626 06-19-2003 Bellomo et al. 89 PCT WO 98/39035 09-11-1998 Herlyn et al. 90 PCT WO 91/12334 08-22-1991 Warren et al. 91 EP 0364306 04-18-1990 Chao 92 EP 0418035 03-3-1995 Kemp et al. 93 EP 0361957 04-4-1990 Bell et al. 94 EP 0271211 08-19-1992 Twardzik et al.			Thompson et al.	08-8-1994	PCT WO 94/28123	79	
82 PCT WO 98/54301 03-3-1998 Mickle et al. 83 PCT WO 99/49807 07-7-1999 Mitrani 84 PCT WO 96/15225 05-23-1996 Mitrani 85 PCT WO 03/040686 05-15-2003 Pearlman et al. 86 PCT WO 03/049783 06-19-2003 Bellomo et al. 87 PCT WO 03/039382 05-15-2003 Pearlman et al. 88 PCT WO 03/049626 06-19-2003 Bellomo et al. 89 PCT WO 98/39035 09-11-1998 Herlyn et al. 90 PCT WO 91/12334 08-22-1991 Warren et al. 91 EP 0364306 04-18-1990 Chao 92 EP 0418035 03-3-1995 Kemp et al. 93 EP 0361957 04-4-1990 Bell et al. 94 EP 0271211 08-19-1992 Twardzik et al.			Isner	02-11-1999	PCT WO 99/06073	80	
83 PCT WO 99/49807 07-7-1999 Mitrani 84 PCT WO 96/15225 05-23-1996 Mitrani 85 PCT WO 03/040686 05-15-2003 Pearlman et al. 86 PCT WO 03/049783 06-19-2003 Bellomo et al. 87 PCT WO 03/039382 05-15-2003 Pearlman et al. 88 PCT WO 03/049626 06-19-2003 Bellomo et al. 89 PCT WO 98/39035 09-11-1998 Herlyn et al. 90 PCT WO 91/12334 08-22-1991 Warren et al. 91 EP 0364306 04-18-1990 Chao 92 EP 0418035 03-3-1995 Kemp et al. 93 EP 0361957 04-4-1990 Bell et al. 94 EP 0271211 08-19-1992 Twardzik et al.	_		Parmacek et al.	04-16-1998	PCT WO 98/15575	81	
84 PCT WO 96/15225 05-23-1996 Mitrani 85 PCT WO 03/040686 05-15-2003 Pearlman et al. 86 PCT WO 03/049783 06-19-2003 Bellomo et al. 87 PCT WO 03/039382 05-15-2003 Pearlman et al. 88 PCT WO 03/049626 06-19-2003 Bellomo et al. 89 PCT WO 98/39035 09-11-1998 Herlyn et al. 90 PCT WO 91/12334 08-22-1991 Warren et al. 91 EP 0364306 04-18-1990 Chao 92 EP 0418035 03-3-1995 Kemp et al. 93 EP 0361957 04-4-1990 Bell et al. 94 EP 0271211 08-19-1992 Twardzik et al.		T	Mickle et al.	03-3-1998	PCT WO 98/54301	82	
85 PCT WO 03/040686 05-15-2003 Pearlman et al. 86 PCT WO 03/049783 06-19-2003 Bellomo et al. 87 PCT WO 03/039382 05-15-2003 Pearlman et al. 88 PCT WO 03/049626 06-19-2003 Bellomo et al. 89 PCT WO 98/39035 09-11-1998 Herlyn et al. 90 PCT WO 91/12334 08-22-1991 Warren et al. 91 EP 0364306 04-18-1990 Chao 92 EP 0418035 03-3-1995 Kemp et al. 93 EP 0361957 04-4-1990 Bell et al. 94 EP 0271211 08-19-1992 Twardzik et al.			Mitrani	07-7-1999	PCT WO 99/49807	83	
86 PCT WO 03/049783 06-19-2003 Bellomo et al. 87 PCT WO 03/039382 05-15-2003 Pearlman et al. 88 PCT WO 03/049626 06-19-2003 Bellomo et al. 89 PCT WO 98/39035 09-11-1998 Herlyn et al. 90 PCT WO 91/12334 08-22-1991 Warren et al. 91 EP 0364306 04-18-1990 Chao 92 EP 0418035 03-3-1995 Kemp et al. 93 EP 0361957 04-4-1990 Bell et al. 94 EP 0271211 08-19-1992 Twardzik et al.			Mitrani	05-23-1996	PCT WO 96/15225	84	
87 PCT WO 03/039382 05-15-2003 Pearlman et al. 88 PCT WO 03/049626 06-19-2003 Bellomo et al. 89 PCT WO 98/39035 09-11-1998 Herlyn et al. 90 PCT WO 91/12334 08-22-1991 Warren et al. 91 EP 0364306 04-18-1990 Chao 92 EP 0418035 03-3-1995 Kemp et al. 93 EP 0361957 04-4-1990 Bell et al. 94 EP 0271211 08-19-1992 Twardzik et al.			Pearlman et al.	05-15-2003	PCT WO 03/040686	85	
88 PCT WO 03/049626 06-19-2003 Bellomo et al. 89 PCT WO 98/39035 09-11-1998 Herlyn et al. 90 PCT WO 91/12334 08-22-1991 Warren et al. 91 EP 0364306 04-18-1990 Chao 92 EP 0418035 03-3-1995 Kemp et al. 93 EP 0361957 04-4-1990 Bell et al. 94 EP 0271211 08-19-1992 Twardzik et al.			Bellomo et al.	06-19-2003	PCT WO 03/049783	86	
89 PCT WO 98/39035 09-11-1998 Herlyn et al. 90 PCT WO 91/12334 08-22-1991 Warren et al. 91 EP 0364306 04-18-1990 Chao 92 EP 0418035 03-3-1995 Kemp et al. 93 EP 0361957 04-4-1990 Bell et al. 94 EP 0271211 08-19-1992 Twardzik et al.			Pearlman et al.	05-15-2003	PCT WO 03/039382	87	
90 PCT WO 91/12334 08-22-1991 Warren et al. 91 EP 0364306 04-18-1990 Chao 92 EP 0418035 03-3-1995 Kemp et al. 93 EP 0361957 04-4-1990 Bell et al. 94 EP 0271211 08-19-1992 Twardzik et al.			Bellomo et al.	06-19-2003	PCT WO 03/049626	88	
91 EP 0364306 04-18-1990 Chao 92 EP 0418035 03-3-1995 Kemp et al. 93 EP 0361957 04-4-1990 Bell et al. 94 EP 0271211 08-19-1992 Twardzik et al.			Herlyn et al.	09-11-1998	PCT WO 98/39035	89	
92 EP 0418035 03-3-1995 Kemp et al. 93 EP 0361957 04-4-1990 Bell et al. 94 EP 0271211 08-19-1992 Twardzik et al.			Warren et al.	08-22-1991	PCT WO 91/12334	90	
93 EP 0361957 04-4-1990 Bell et al. 94 EP 0271211 08-19-1992 Twardzik et al.					EP 0364306	91	
93 EP 0361957 04-4-1990 Bell et al. 94 EP 0271211 08-19-1992 Twardzik et al.					EP 0418035	92	
94 EP 0271211 08-19-1992 Twardzik et al.				04-4-1990		93	
			Twardzik et al.	 		94	
75 El CEETTI CS 20 1707 Wildow Ct ul.			Mason et al.	05-20-1987	EP 0222491	95	
Examiner Date		<u> </u>		L			<u> </u>

Examiner Date Considered

PTO/SB/08b (08-03)

Approved for use through 06/30/2006. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control of the control of the contains a valid OMB control of the control of

Under the Paperwork Reduction Act of 1993, no persons are required to respond to a collection of information unle		Complete if Known			
Substitute for form 1449A/PTO		Application Number	10/519,838		
INFORMATION DISCLOSURE			Filing Date	January 12, 2005	
STATEMENT BY APPLICANT		First Named Inventor	Eduardo N.		
				MITRANI et al	
(use as many sheets as necessary)			Group Art Unit	N/A	
Chara			Examiner Name NA		
Sheet	3				
	 	OTHER PRIOR ART – NON PATENT LITER		-Cal-	
Examiner Initials	Cite No. ¹	item (book, magazine, journal, serial symposium, catalog, etc.) dat	ude name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the n (book, magazine, journal, serial symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published. hara et al. "Reconstruction of the Skin in Three-Dimensional Collagen Gel		
	96	Sugihara et al. "Reconstruction of the Skin in Three-Di Matrix Culture", In Vitro Cell Dev. Biol., 27A: 142-14			
	97	Li et al. "Skin Toxicity Determined In Vitro by Three-I		e	
		Histoculture", Proc. Natl. Acad. Sci. USA, 88: 1908-19			
	98	Parenteau et al. "Epidermis Generated In Vitro: Practic	al Considerations and		
	00	Applications", Journal of Cellular Biochemistry, 45: 24		T -	
	99	Norris "A Generous Contribution by Roche Dermatolo			
		Roche Inc. to the Endowment for the Journal Has Supp	ooned This Issue", The Jo	purnat	
	100	of Investigative Dermatiology, 95(4): 1, 1990.	. 2 D 1000 D		
	100	Goldberg Alternative Methods in Toxicology Series, 7:			
	101	Bell et al. "Testskin: A Hybrid Organism Covered by A Equivalent Designed for Toxicity and Other Testing", A			
		Toxicology, 6(Chap.A3): 15, 1988.	Alternative Methods in		
	102	Kao et al. "Skin Penetration and Metabolism of Topica	Illy Amaliad Chamicals in	<u> </u>	
	102	Mammalian Species, Including Man: An In Vitro Study			
		Testosterone", Toxicology and Applied Pharmacology,		iid	
	103	Coulomb et al. "Interactions Dermo-Épidemiques et Ph			
	103		iarmacologie Cutanee,		
	104	Pathologie Biologie, 40(2): 139-146, 1992.	y Applications in		
	104	Parrish et al. "Minireview: Precision-Cut Tissue Slices: Applications in			
	105	Pharmacology and Toxicology", Life Sciences, 57(21): 1887-1901, 1995. Villeval et al. "Retrovirus-Mediated Transfer of the Erythroprotein Gene in			
	103	Hematopoietoic Cells Improves the Erythrocyte Phenor			
		Thalassemia", Blood, 84(3): 928-933, 1994.	type in Marine p-		
	106	Descamps et al. "Organoids Direct Systematic Express	ion of Erythropoietin in		
	100	Mice", Gene Therapy, 2: 411-417, 1995.	ion of Erythropoletin in		
	107	Palù et al. "In Pursuit of New Developments for Gene"	Therany of Human Disea	cac ^{††}	
	107	J. Biotechnology, 68: 1-13, 1999.	Therapy of Human Disea	.scs ,	
	108	Romano et al. "Gene Transfer Technology in Therapy:	Current Applications on		
	100	Future Goals", Stem Cell, 17: 191-202, 1999.	Current Applications and	u	
. <u>-</u>	109	Kappel et al. "Regulating Gene Expression in Transger	nic Animals", Current Op	inion	
		in Biology, 3: 548-553, 1992.			
	110	Mullins et al. "Transgenesis in Nonmurine Species", H 1993.	ypertension, 22(4): 630-6	533,	
	111	Mullins et al. "Transgenesis in the Rat and Larger Man	amale" I Clin Invest O	7(7).	
	111	1557-1560, 1996.	nmais, J. Clin. invest., 9	/(<i>1</i>):	
	112	Houdebine "Production of Pharmaceutical Proteins Fro	om Transgenic Animals".	J.	
		Biotechnology, 34: 269-287, 1994.	,		
	113				
	45: 57-68, 1996.				
	Sigmund "Viewpoint: Are Studies in Genetically Altered Mice Out of Control?" Arterioscler. Thromb. Vasc. Biol., 20: 1425-1429, 2000.		,		
	115	Niemann "Transgenic Farm Animals Get Off the Ground Strain		7.	
	113	73-75, 1998.	na, managome Researci	١, /٠	
	116		and Obstacles to Success	,,	
	Science, 270: 404-410, 1995. 117 Verma et al. "Gene Therapy - Promises, Problems and Prospects", Nature, 389: 239-			,	
				239-	
		242, 1997.			
	118	Deonarain "Ligand-Targeted Receptor-Mediated Vector	ors for Gene Delivery", E	xp.	

		Opin. Ther. Patents, 8(1): 53-69, 1998.	
	119	Miller et al. "Targeted Vectors for Gene Therapy", FASEB J., 9: 190-199, 1995.	
	120	Eck et al. "Gene-Based Therapy", in: Goodman & Gilman's 'The Pharmacological	
		Basis of Therapeutics', 9/E, Chap.5: 77-101, 1997.	
	121	Ledley "Pharmaceutical Approach to Somatic Gene Therapy", Pharm. Res., 13(11):	
<u> </u>	122	1595-1614, 1996. Saadi et al. "Immunology of Xenotransplantation", Life Sciences, 62(5): 365-387,	
	122	1998.	
<u> </u>	123	Inverardi et al. "Cell Transplantation", in: 'Transplantation Biology: Cellular and	
	.23	Molecular Aspects', Raven Pub., Chap. 56, 1996.	
	124	Philpott et al. "Rat Hair Follicle Growth In Vivo", Br. J. Derm., 127: 600-607, 1992.	
	125	Lingna "Skin Toxicity Determined In Vitro by Three-Dimensional, Native-State	
		Histoculture", Proc. Natl. Acad. Sci. USA, 88: 1908-1912, 1991.	
	126	Cameron "Recent Advances in Transgenic Technology", Molecular Biotechnology,	
		7: 253-265, 1997.	
	127	Eto et al. "Purification and Charcterization of Erythroid Differntiation Factor (EDF)	
		Isolated From Human Leukemia Cell Line THP-1", Biochemical and Biophysical	
	128	Research Communications, 142(3): 1095-1103, 1987.	
	120	Chesnokova et al. "The Thymic Factor Tactivin Prevents ACTH From Stimulating SteroIdogenesis by Mouse Adrenal Cells", Institute of Cytology and Genetics, USSR	
		Academy of Science, 1990.	
	129	Burke et al. " Preparation of Clone Libraries in Yeast Artificial-Chromosome	
		Vectors", Methods in Enzymology, 194: 251-270, 1991	
	130	Carey et al. "An Amino-Terminal Fragment of GAL4 Binds DNA as A Dimer", J.	
		Mol. Biol., 209: 423-4332, 1989.	
	131	Gale et al. "Growth Factors Acting Via Endothelial Cell-Specific Receptor Tyrosine	
		Kinases: VEGF's, Angiopoietins, and Ephrins in Vascular Development", Genes and	
		Development, 13: 1055-1066, 1999.	
	132	Huxley et al. "The Human HPRT Gene on A Yeast Artifical Chromosomes Is	
		Functional When Transferred to Mouse Cells by Cell Fusion", Genomics, 9: 742-750, 1991.	
	133	Lamb et al. "Introduction and Expression of the 400 Kilobase Precursor Amyloid	
	133	Protein Gene in Transgenic Mice", Nature Genetics, 5: 22-29, 1993.	
	134	Pearson et al. "Expression of the Human Beta-Amyloid Precursor Protein Gene From	
		A Yeast Artificial Chromosome in Transgenic Mice.", Proc. Natl. Acad. Sci. USA,	
		90: 10578-10582, 1993.	
	135	Achim "In Vivo Model of HIV Infection of the Human Brain", Advances in	
		Neuroimmunology, 4(3): 261-264, 1994.	
	136	Cress et al. "Critical Structural Elements of the VP16 Transcriptional Activation	
	137	Domain", Science, 251: 87-90, 1991.	
	137	Davies et al. "Targeted Alterations in Yeast Artificial Chromosomes for Inter-Species Gene Transfer", Nucleic Acids Research, 20(11): 2693-2698, 1992.	
	138	Dickinson et al. "High Frequency Gene Targeting Using Insertional Vectors", Human	
	150	Molecular Genetics, 2(8): 1299-1302, 1993.	
	139	Futterer et al. "Translation of A Polycistronic mRNA in the Presence of the	
		Cauliflower Mosaic Virus Transactivator Protein", The EMBO Journal, 10: 3887-	
		3896, 1991.	
	140	Jakobovits et al. "Germ-Line Transmission and Expression of A Human-Derived	
		Yeast Artifical Chromosome", Nature, 362: 255-261, 1993.	
	141	Rothstein "Targeting, Disruption, Replacement, and Allele Rescue: Integrative DNA	
	142	Transformation in Yeast", Methods in Enzymology", 194: 281-301, 1991. Sadowski et al. "GAL4-VP16 Is An Unusually Potent Transcriptional Activator",	
	142		
 	143	Nature, 335: 563-564, 1988. Schedl et al. "A Yeast Artificial Chromosome Covering the Tyrosinase Gene Confers	
		Copy Number-Dependent Expression in Transgenic Mice", Nature, 362: 258-261,	
		1993.	
	144	Capecchi "Altering the Genome by Homologous Recombination", Science, 244:	
		1288-1292, 1989.	
	145	Iruela-Arispe et al. "Angiogenesis: A Dynamic Balance of Stimulators and	
<u> </u>		Inhibitors", Thrombosis and Haemostasis, 78(1): 672-677, 1997.	
	146	Epstein et al. "Human Neural Xenografts: Progress in Developing An In-Vivo Model	
		to Study Human Immunodeficiency Virus (HIV) and Human Cytomegalovirus	

. .

		(HCMV) Infection", Advances in Neuroimmunology, 4(3): 257-260, 1994.	
	147	Sampson-Johannes et al. "Colonization of Human Lung Grafts in SCID-Hu Mice by	
		Human Colon Carcinoma Cells", Int. J. Cancer, 65: 864-869, 1996.	
	148	Mansbridge et al. "Three-Dimensional Fibroblast Culture Implant for the Treatment	
		of Diabetic Foot Ulcers: Metabolic Activity and Therapeutic Range", Tissue	
		Engineering, 4(4): 403-414, 1998.	
	149	Freshney "Culture of Animal Cells, A Manual of Basic Technique: Three-	
		Dimensional Culture System", 2nd Ed.(Chap.22): 297-307, 1987. Esp. P.302.	
	150	Kondo et al. "Long-Term Organ Culture of Rabbit Skin: Effect of EGF on Epidermal	
		Structure In Vitro", Journal of Investigative Dermatology, 95(4): 397-402, 1990.	
		P.397, Col.2.	
	151	Agren et al. "Human Fetal Pancreas: Culture and Function In Vitro", Diabetes,	
		29(Suppl.1): 64, 1980.	
	152	Choi et al. "TGF-Beta and Retinoic Acid: Regulators of Growth and Modifiers of	
		Differentiation in Human Epidermal Cells", Cell Regulation, 1: 791-809, 1990.	
	153	Rheinwald "Serial Cultivation of Normal Human Epidermal Keratinocytes", Methods	
		in Cell Biology, 21A: 229-254, 1980.	
	154	Pinkus "Examination of the Epidermis by the Strip Method of Removing Horny	
		Layers", J. of Invest. Derm.: 383-386, 1951.	
	155	Soyer et al. "Extracorporeal Assist of Anhepatic Animals With Liver Slice	
		Perfusion", The American Journal of Surgery, P.21-26, 1973.	
	156	Eiseman et al. "Prosthetics in Hepatic Assistance", Transplantation Proceedings,	
		3(4): 1519, 1971.	
	157	Gerlach "Hepatocyte Culture and Bioreactor Design for Liver Support Systems", in:	
		'Acute Liver Failure', Cambridge University Press, Chap.19, 1997.	
	158	Levine "The Growth of Adult Human Skin In Vitro", Br. J. Derm., 86: 481, 1972.	
	159	Boyce et al. "Calcium-Regulated Differentiation of Normal Human Epidermal	
		Keratinocytes in Chemically Defined Clonal Culture and Serum-Free Serial Culture",	
		Journ. of Investigative Dermatology, 81: 33s-40s, 1983.	
	160	Boisseau et al. "Production of Epidermal Sheets in a Serum Free Culture System: A	
		Further Appraisal of the Role of Extracellular Calcium", Journal of Dermatological	
		Science, 3: 111-120, 1992.	
	161	Granov et al. "Extracorporeal Fixation of Liver Slices Onto the System of 'Artificial	
		Kidney' Apparatus", Pub Med., 116(3): 106-109, 1976.	
	162	Watson et al. "Sheep Vibrissa Dermal Papillae Induce Hair Follicle Formation in	
		Heterotypic Skin Equivalents", British Journal of Dermatology, 131: 827-835, 1994.	
	163	Varani et al. "All-Trans Retinoic Acid and Extracellular Ca2+ Differentially	
		Influence Extracellular Matrix Production by Human Skin in Organ Culture",	
		American Journal of Pathology, 142(6): 1813-1822, 1993.	
	164	Reynolds et al. "Cultured Dermal Papilla Cells Induce Follicle Formation and Hair	
		Growth by Transdifferentiation of An Adult Epidermis", Development, 115: 587-	
		593, 1992.	
	165	Gurdon "The Generation of Diversity and Pattern in Animal Development", Cell, 68:	
		185-199, 1992.	

Signature	Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1. Applicant's unique citation designation number (optional). Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. this collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.